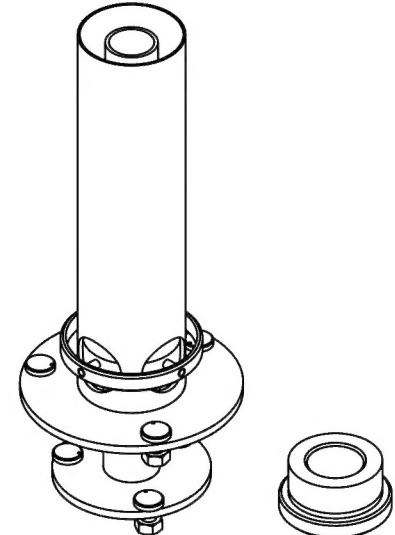
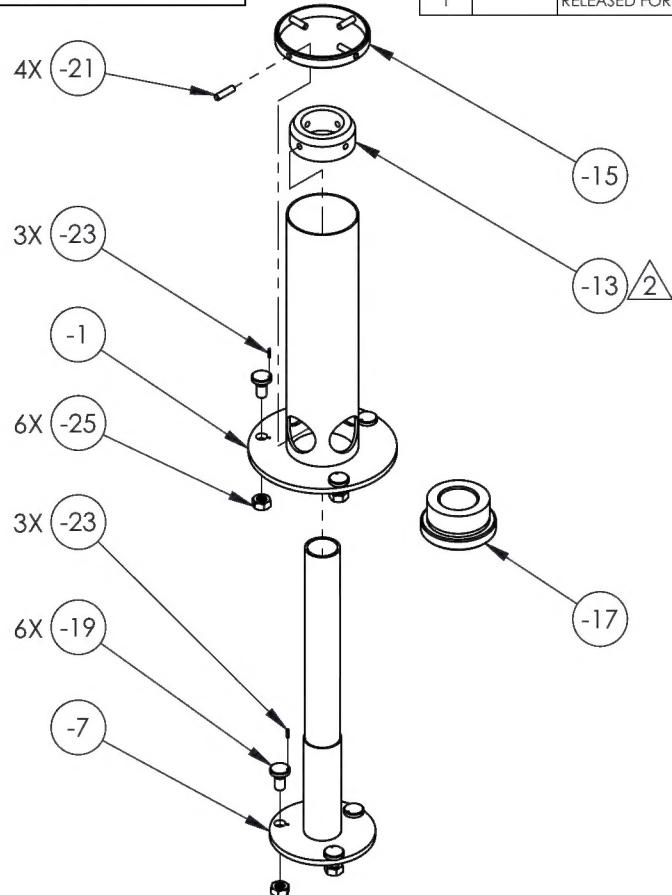


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|-----|--|--|-------------------------|--|--|-------------|--|--|-----------|--|--|---------|--|--|----------|--|--|
| 1 | | | RELEASED FOR PRODUCTION | | | | | | 9/19/2016 | | | SM | | | JAG | | |



NOTES:

1. REF AIRBUS T/N: 105-60101W4.

2. TIGHT FIT TO -1, CAN MOVE USING -15.

| ASSY QTY | ASSY QTY | B/O | Part # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | PG. |
|----------|----------|-----|-----------------|----------|-------------------------|--|-----------------------------------|-----|
| X | | | -1 | 1 | OUTER WELDMENT | | | 2 |
| 1 | | | -3 | | OUTER PLATE | A36/1018/1020 HR | | 3 |
| 1 | | | -5 | | OUTER TUBE | STEEL | | 4 |
| X | | | -7 | 1 | INNER WELDMENT | | | 5 |
| 1 | | | -9 | | INNER PLATE | A36/1018/1020 HR | | 6 |
| 1 | | | -11 | | INNER TUBE | STEEL | | 7 |
| | | | -13 | 1 | INNER ALIGNMENT BUSHING | A36/1018/1020 HR | | 8 |
| | | | -15 | 1 | RING | A36/1018/1020 HR | | 9 |
| | | | -17 | 1 | OUTER ALIGNMENT BUSHING | A36/1018/1020 HR | | 10 |
| | | | -19 | 6 | FASTENER | 4140/4142 | | 11 |
| B/O | -21 | 4 | DOWEL PIN | | S.S. | Ø3/16 x 3/4 (MCMASTER-CARR # 97395A471) | 1 | |
| B/O | -23 | 6 | SMALL DOWEL PIN | | S.S. | Ø1/16 x 5/16 (MCMASTER-CARR # 97395A403) | 1 | |
| B/O | -25 | 6 | NUT | | STEEL | M8 x 1.25 (MCMASTER-CARR # 90591A161) | 1 | |
| ASSY -7 | ASSY -1 | | | | | | | |

| | |
|--------------------------------|--|
| DART AEROSPACE | |
| ENGINE ALIGNMENT DEVICE | |
| DWG NO. | REV 1 RBE105-60101W4 |
| MAT'L | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES |
| HEAT TREAT | .XXX ± .005 FRACTIONS ± 1/8 |
| FINISH | .XX ± .01 ANGLES ± 5° |
| SPEC | X ± .1 SURFACES = 125 ✓ |
| DRAWN BY: | MACKOVJAK |
| CHECKED: | CLOUGH |
| OPPS APPR: | ANDERSON |
| QA APPR: | LINDSAY |
| APPROVED: | GILBERT H145 |
| SCALE | 1:6 |
| DATE | 7/29/2016 |
| SHEET | 1 OF 11 |

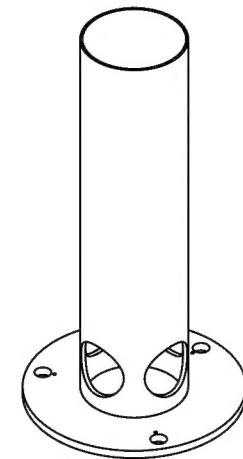
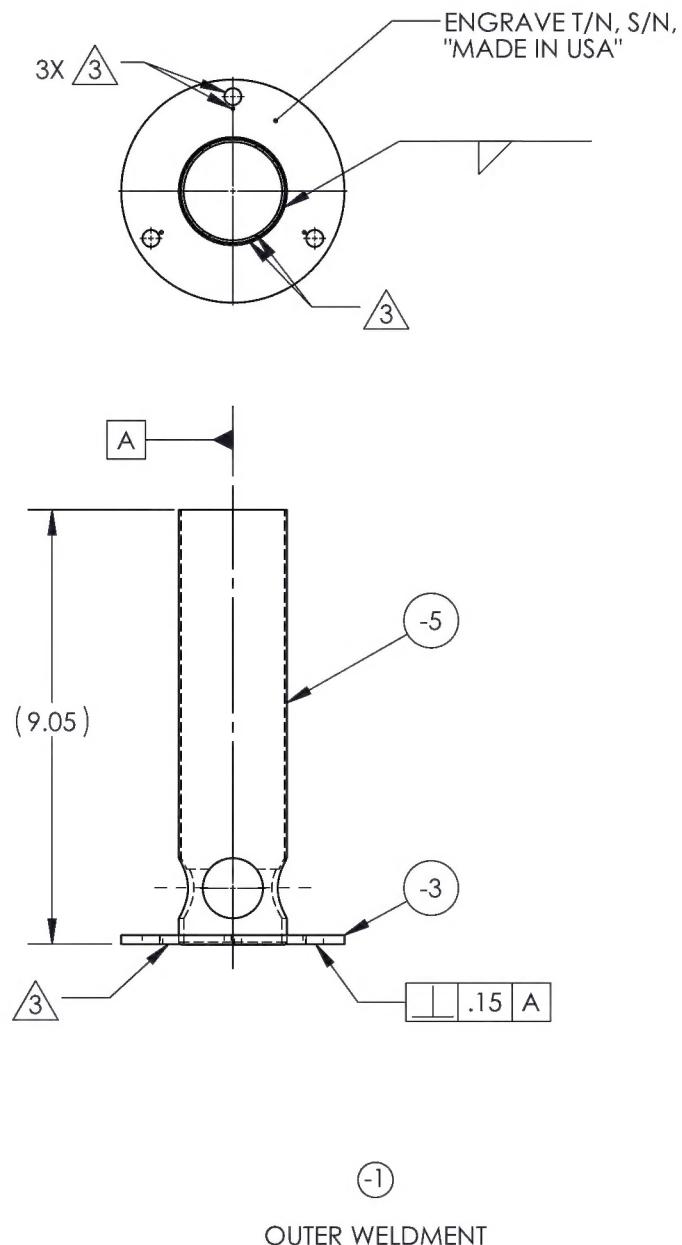
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .005 FRACTIONS ± 1/8
.XX ± .01 ANGLES ± 5°
X ± .1 SURFACES = 125 ✓

1. BREAK ALL SHARP EDGES
.015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL

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NOTES:
DUAL FINISH:

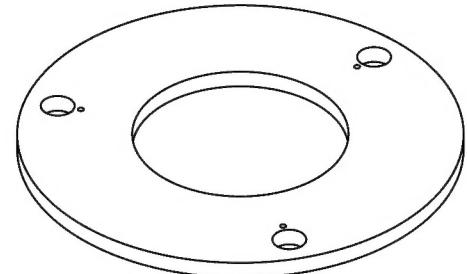
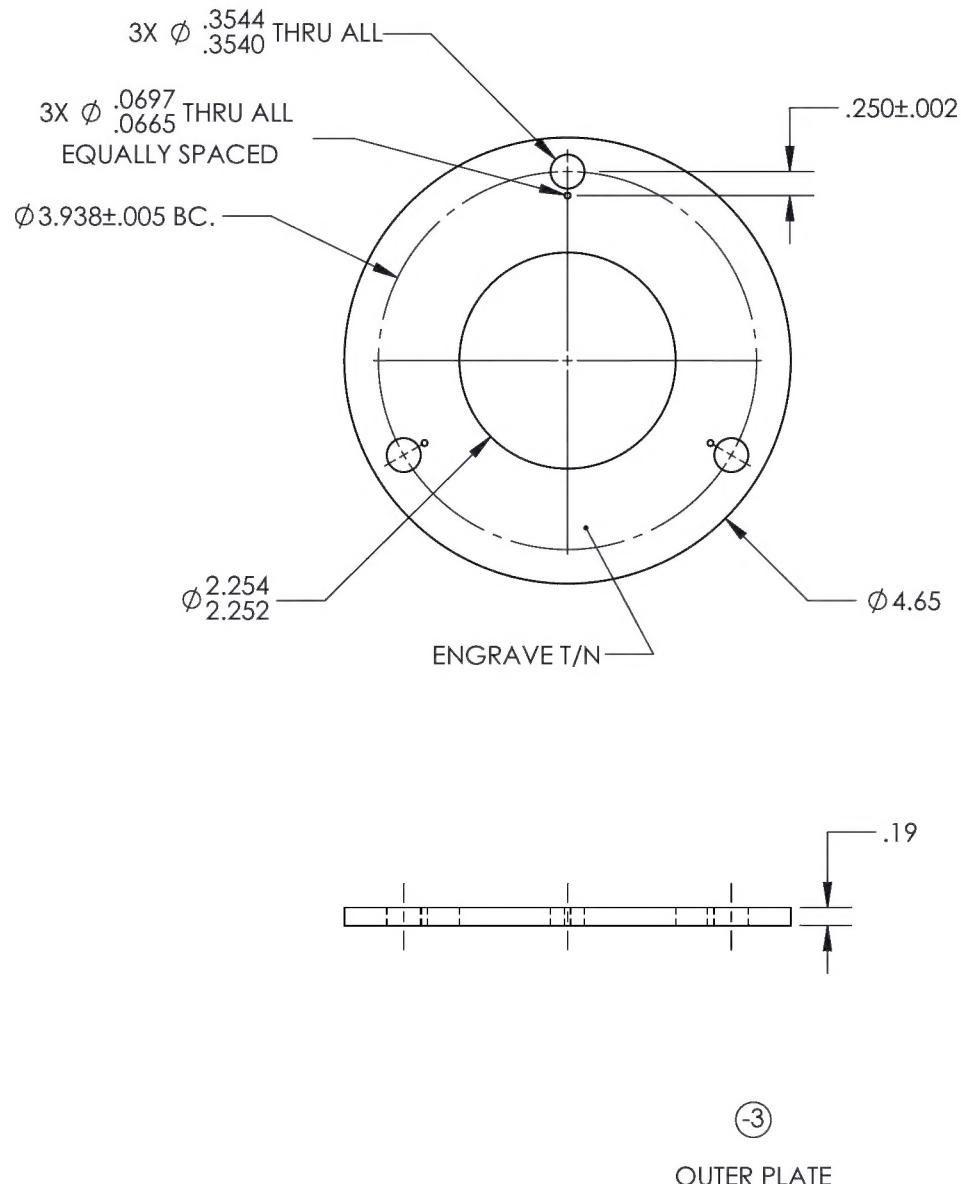
1. ZINC PLATE: ASTM B633 TYPE I SC2
2. POWDER COAT YELLOW: FED #13538

NO POWDER COAT ON SURFACE.

| DART AEROSPACE | |
|---|---------------------|
| TITLE ENGINE ALIGNMENT DEVICE | |
| DWG NO. RBE105-60101W4-1 | |
| REV 1 | |
| MAT'L UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT .XXX ± .010 FRACTIONS ± 1/8 FINISH .XX ± .03 ANGLES ± 1° SEE NOTES X ± .1 SURFACES = 125 ✓ SPEC DRAWN BY: MACKOVJAK CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT USED ON MODEL H145 | |
| SCALE 1:4 | DATE 7/28/2016 |
| SHEET 2 OF 11 | |

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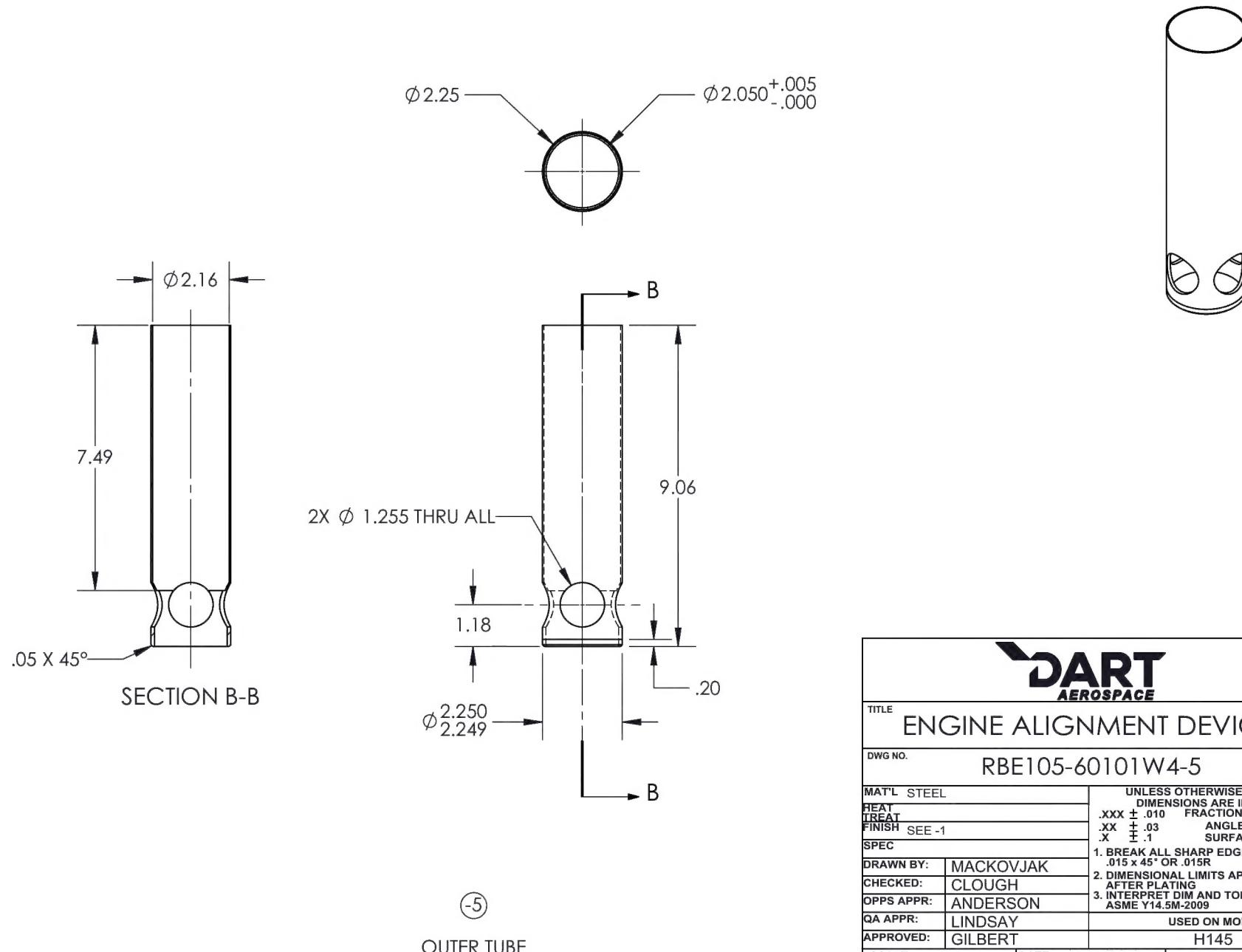
| REV | ECR | REVISIONS | | |
|-----|-----|-------------|------|------------------|
| | | DESCRIPTION | DATE | INITIAL APPROVED |



| DART AEROSPACE | |
|--|----------------|
| TITLE ENGINE ALIGNMENT DEVICE | |
| DWG NO. RBE105-60101W4-3 | |
| MAT'L A36/1018/1020 HR | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | |
| HEAT .XXX ± .010 FRACTIONS ± 1/8 | |
| TREAT .XX ± .03 ANGLES ± 1° | |
| FINISH SEE -1 X ± .1 SURFACES = 125 ✓ | |
| SPEC | |
| DRAWN BY: MACKOVJAK | |
| CHECKED: CLOUGH | |
| OPPS APPR: ANDERSON | |
| QA APPR: LINDSAY | |
| APPROVED: GILBERT | |
| SCALE 1:2 | DATE 7/28/2016 |
| SHEET 3 OF 11 | |

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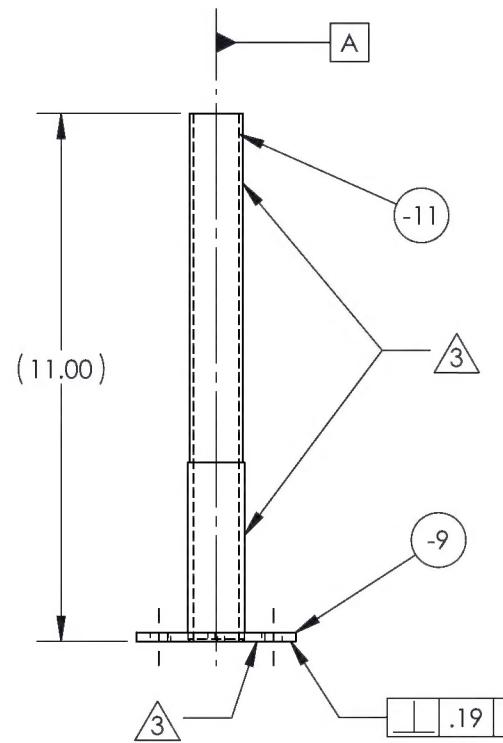
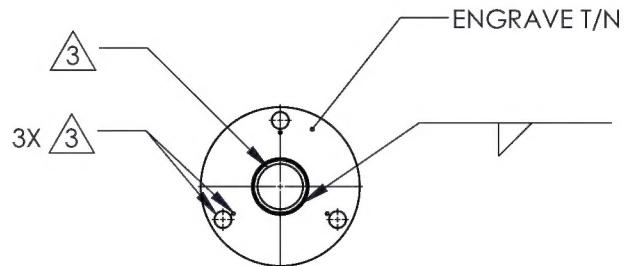
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| | | DESCRIPTION | DATE | INITIAL |
| | | | | APPROVED |



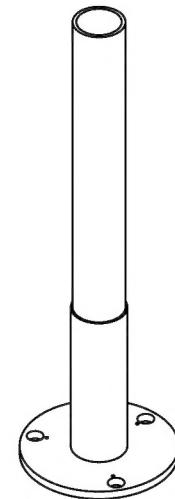
| DART AEROSPACE | |
|---|----------------|
| TITLE | |
| ENGINE ALIGNMENT DEVICE | |
| DWG NO. RBE105-60101W4-5 | |
| REV 1 | |
| MATERIAL STEEL UNLESS OTHERWISE SPECIFIED | |
| HEAT FRACTIONS $\pm 1/8$ | |
| TREAT .XXX $\pm .010$ | |
| FINISH .XX $\pm .03$ ANGLES $\pm 1^\circ$ | |
| SPEC X $\pm .1$ SURFACES = 125 ✓ | |
| 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R | |
| 2. DIMENSIONAL LIMITS APPLY AFTER PLATING | |
| 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 | |
| DRAWN BY: MACKOVJAK | USED ON MODEL |
| CHECKED: CLOUGH | |
| OPPS APPR: ANDERSON | |
| QA APPR: LINDSAY | H145 |
| APPROVED: GILBERT | |
| SCALE 1:4 | DATE 7/28/2016 |
| SHEET 4 OF 11 | |

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|-----|-----|-----------|-------------|------|---------|----------|
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INNER WELDMENT



NOTES:

DUAL FINISH:

1. ZINC PLATE: ASTM B633 TYPE I SC2
2. POWDER COAT YELLOW: FED #13538

△ NO POWDER COAT ON SURFACE.



TITLE
ENGINE ALIGNMENT DEVICE

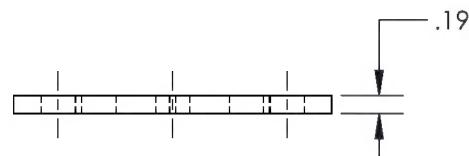
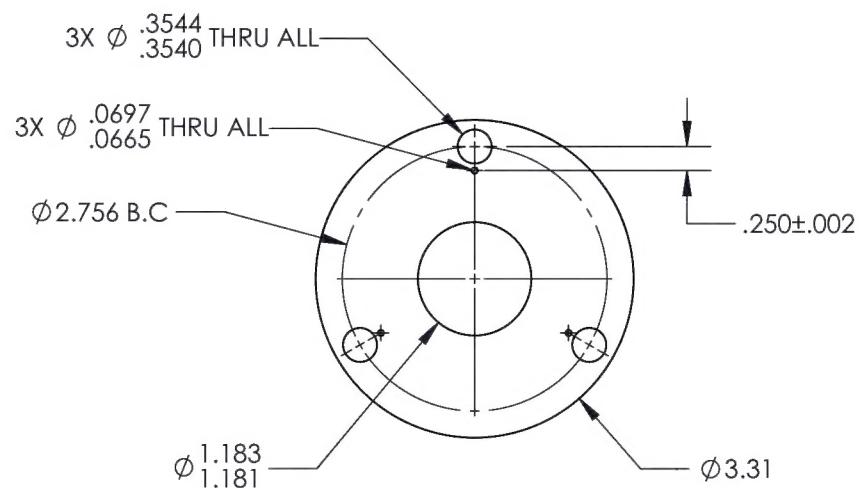
DWG NO. RBE105-60101W4-7

REV 1

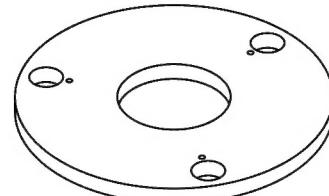
| | |
|---------------------|--|
| MAT'L | UNLESS OTHERWISE SPECIFIED |
| HEAT | DIMENSIONS ARE IN INCHES |
| TREAT | .XXX ± .010 FRACTIONS ± 1/8 |
| FINISH SEE NOTES | .XX ± .03 ANGLES ± 1° |
| SPEC | X ± .1 SURFACES = 125 ✓ |
| DRAWN BY: MACKOVJAK | 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R |
| CHECKED: CLOUGH | 2. DIMENSIONAL LIMITS APPLY AFTER PLATING |
| OPPS APPR: ANDERSON | 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 |
| QA APPR: LINDSAY | USED ON MODEL |
| APPROVED: GILBERT | H145 |
| SCALE 1:4 | DATE 7/28/2016 |
| | SHEET 5 OF 11 |

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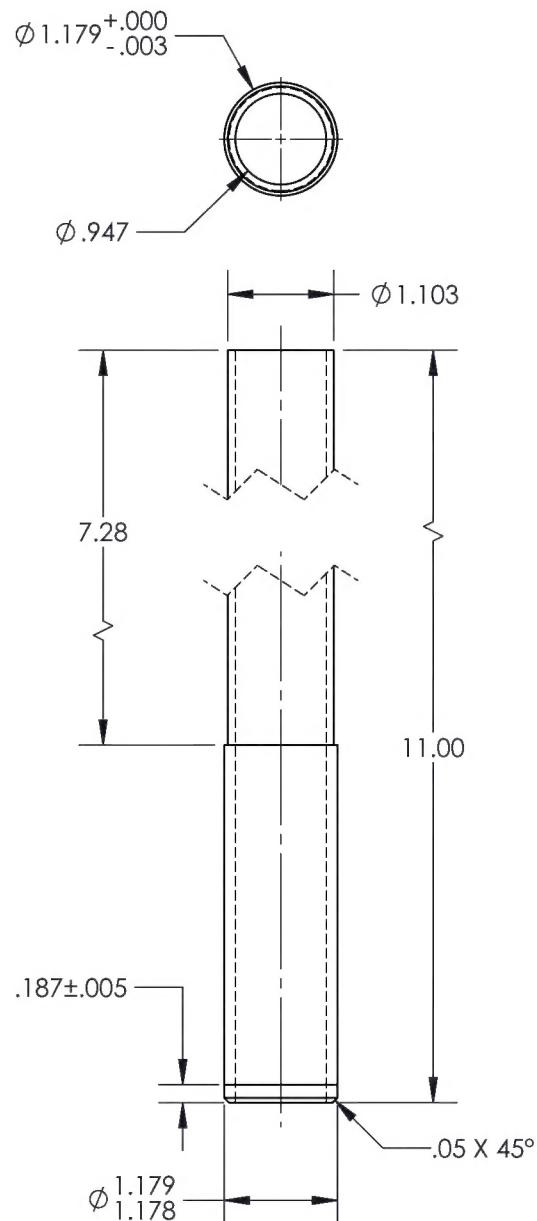
(-9)
INNER PLATE



| DART AEROSPACE | |
|--|----------------|
| TITLE ENGINE ALIGNMENT DEVICE | |
| DWG NO. RBE105-60101W4-9 | |
| REV 1 | |
| MAT'L A36/1018/1020 HR | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | |
| HEAT .XXX $\pm .010$ FRACTIONS $\pm 1/8$ | |
| TREAT .XX $\pm .03$ ANGLES $\pm 1^\circ$ | |
| FINISH SEE -7 .X $\pm .1$ SURFACES = 125 | |
| SPEC | |
| DRAWN BY: MACKOVJAK | |
| CHECKED: CLOUGH | |
| OPPS APPR: ANDERSON | |
| QA APPR: LINDSAY | |
| APPROVED: GILBERT | |
| USED ON MODEL | H145 |
| SCALE 1:2 | DATE 7/28/2016 |
| SHEET 6 OF 11 | |

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(-11)

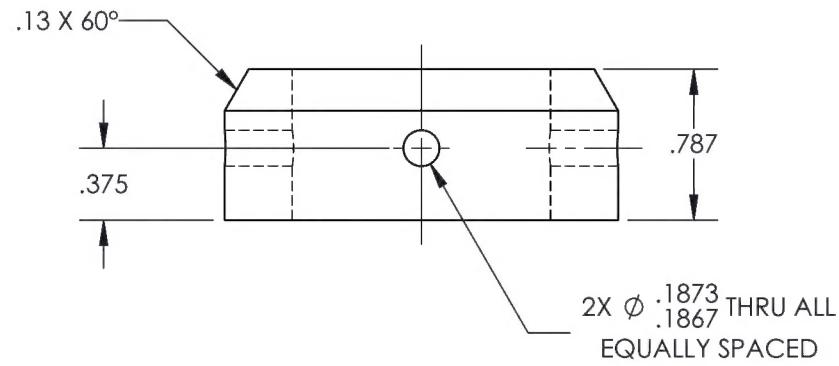
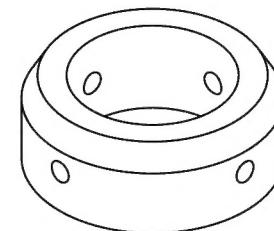
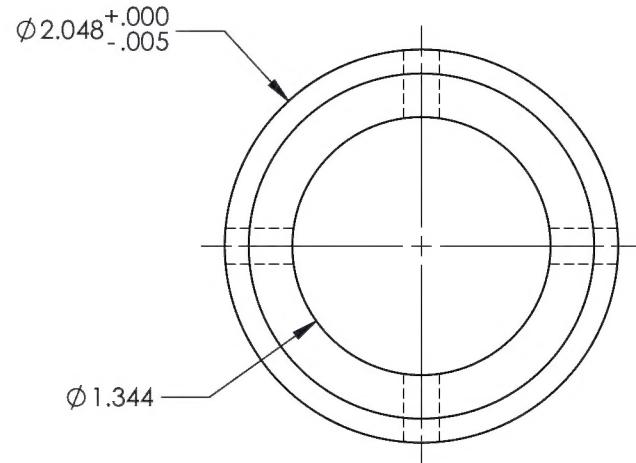
INNER TUBE



| DART AEROSPACE | |
|---|--|
| TITLE | |
| ENGINE ALIGNMENT DEVICE | |
| DWG NO. RBE105-60101W4-11 | |
| REV 1 | |
| MAT'L STEEL UNLESS OTHERWISE SPECIFIED HEAT DIMENSIONS ARE IN INCHES TREAT FRACTIONS $\pm .010$ FINISH SEE -7 ANGLES $\pm 1^\circ$ | |
| SPEC SURFACES = 125 DRAWN BY: MACKOVJAK CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT | |
| USED ON MODEL H145 SCALE 1:2 DATE 7/28/2016 SHEET 7 OF 11 | |

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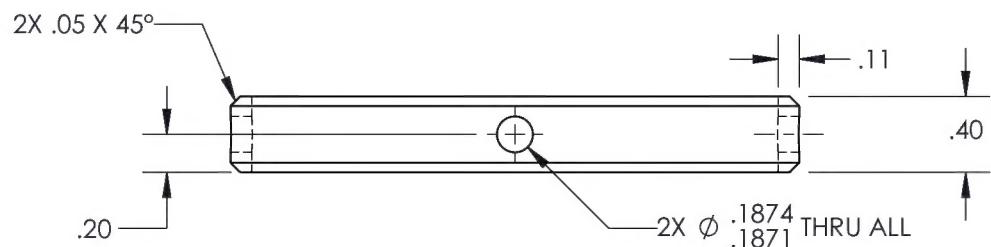
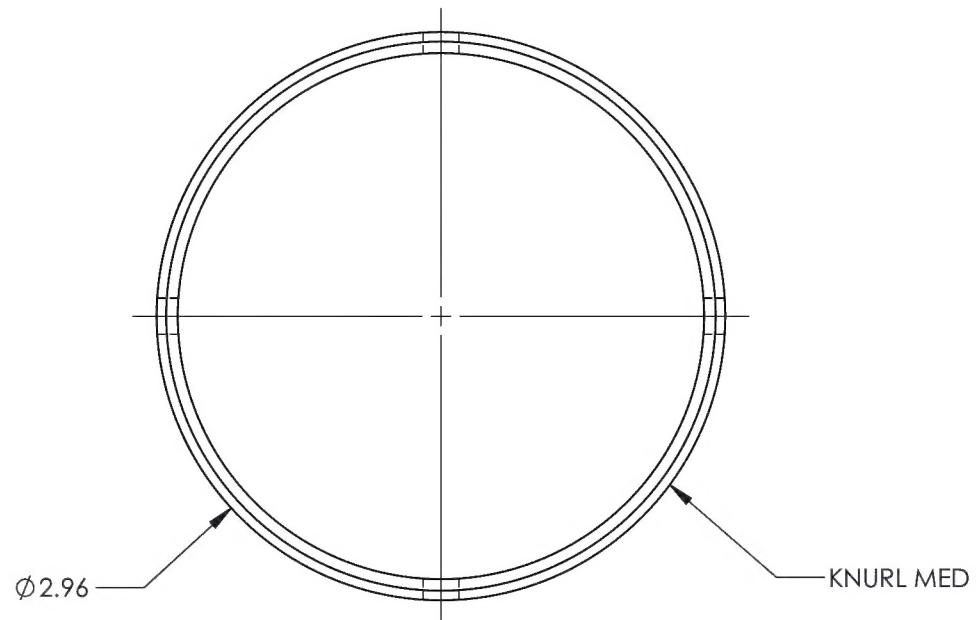
(13)

INNER ALIGNMENT BUSHING

| DART AEROSPACE | |
|--|-----------------------------|
| TITLE | |
| ENGINE ALIGNMENT DEVICE | |
| DWG NO. | RBE105-601-60101W4-13 |
| REV | 1 |
| MAT'L A36/1018/1020 HR | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | |
| HEAT | .XXX ± .005 FRACTIONS ± 1/8 |
| TREAT | .XX ± .01 ANGLES ± 5° |
| FINISH | X ± .1 SURFACES = 125 ✓ |
| SPEC ASTM B633 TYPE I SC 2 | |
| DRAWN BY: | MACKOVJAK |
| CHECKED: | CLOUGH |
| OPPS APPR: | ANDERSON |
| QA APPR: | LINDSAY |
| APPROVED: | GILBERT H145 |
| SCALE | 1:1 |
| DATE | 7/28/2016 |
| SHEET 8 OF 11 | |

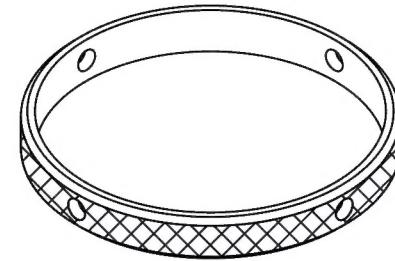
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(-15)

RING



| DART AEROSPACE | |
|--|----------------|
| TITLE ENGINE ALIGNMENT DEVICE | |
| DWG NO. RBE105-60101W4-15 | |
| REV 1 | |
| MAT'L A36/1018/1020 HR | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | |
| HEAT TREAT | |
| SPEC ASTM B633 TYPE I SC 2 | |
| FINISH ZINC PLATE | |
| DRAWN BY: MACKOVJAK | |
| CHECKED: CLOUGH | |
| OPPS APPR: ANDERSON | |
| QA APPR: LINDSAY | |
| APPROVED: GILBERT | |
| SCALE 1:1 | DATE 7/29/2016 |
| SHEET 9 OF 11 | |

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

HEAT TREAT

SPEC ASTM B633 TYPE I SC 2

FINISH ZINC PLATE

DRAWN BY: MACKOVJAK

CHECKED: CLOUGH

OPPS APPR: ANDERSON

QA APPR: LINDSAY

APPROVED: GILBERT

USED ON MODEL

H145

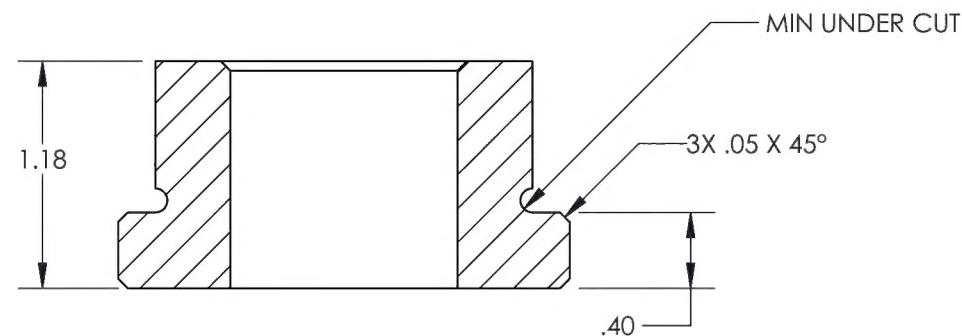
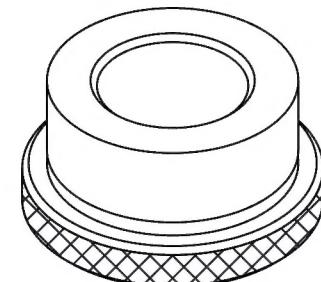
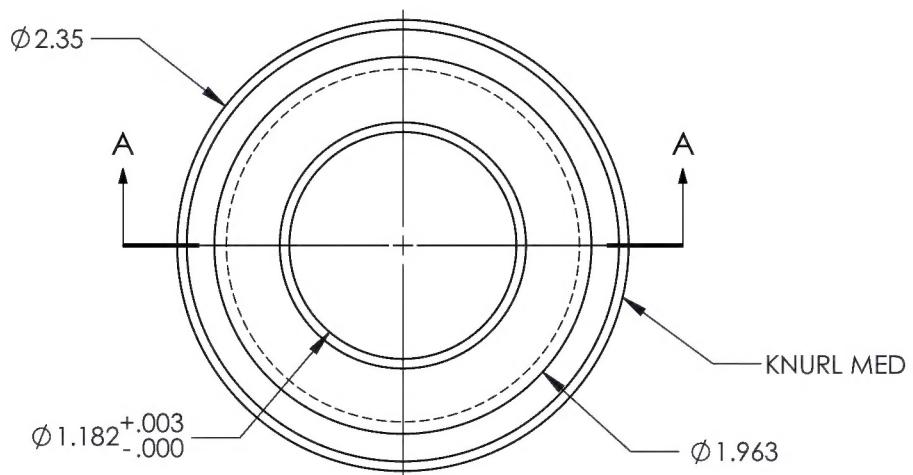
SCALE 1:1

DATE 7/29/2016

SHEET 9 OF 11

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SECTION A-A

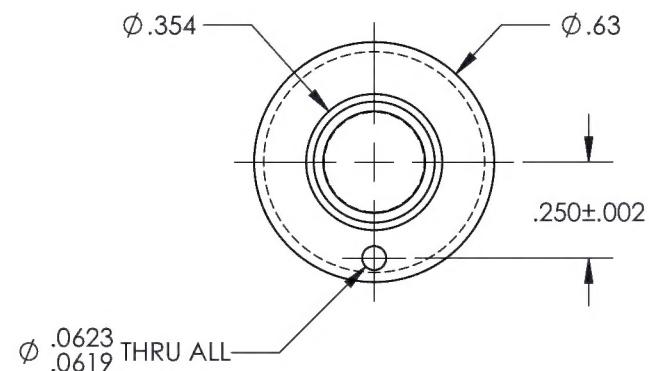
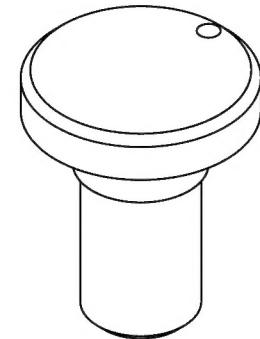
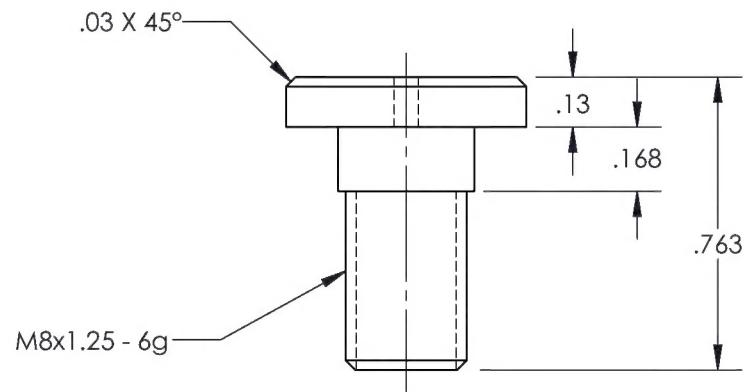
OUTER ALIGNMENT BUSHING

(-17)

| DART AEROSPACE | |
|--|---------------|
| TITLE ENGINE ALIGNMENT DEVICE | |
| DWG NO. RBE105-60101W4-17 | |
| REV 1 | |
| MATERIAL A36/1018/1020 HR | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | |
| HEAT TREAT | |
| SPEC ASTM B633 TYPE I SC 2 | |
| FINISH ZINC PLATE | |
| DRAWN BY: MACKOVJAK | |
| CHECKED: CLOUGH | |
| OPPS APPR: ANDERSON | |
| QA APPR: LINDSAY | |
| APPROVED: GILBERT | |
| SCALE 1:1 | USED ON MODEL |
| DATE 7/29/2016 | H145 |
| SURFACES = 125 | |
| 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R | |
| 2. DIMENSIONAL LIMITS APPLY AFTER PLATING | |
| 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 | |
| SHEET 10 OF 11 | |

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|-----|-----|-------------|------|------------------|
| | | DESCRIPTION | DATE | INITIAL APPROVED |



-19

FASTENER

| DART AEROSPACE | |
|---|--|
| TITLE | |
| ENGINE ALIGNMENT DEVICE | |
| DWG NO. RBE105-60101W4-19 REV 1 | |
| MATERIAL 4140/4142 UNLESS OTHERWISE SPECIFIED HEAT TREAT RC 28-34 DIMENSIONS ARE IN INCHES FINISH ZINC PLATE .XXX ± .005 FRACTIONS ± 1/8 SPEC ASTM B633 TYPE I SC 2 .XX ± .01 ANGLES ± 5° DRAWN BY: MACKOVJAK .X ± .1 SURFACES = 125 ✓ CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT H145 SCALE 2:1 DATE 7/29/2016 SHEET 11 OF 11 | |